

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1574; Project Identifier MCAI-2022-01362-T;

Amendment 39-22274; AD 2022-25-18]

RIN 2120-AA64

Airworthiness Directives; BAE Systems (Operations) Limited Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2005-06-14, which applied to certain British Aerospace Model BAe 146 and Model Avro 146-RJ series airplanes. AD 2005-06-14 required repetitive inspections for cracking of the outer links on the main landing gear (MLG) side stays, and corrective actions if necessary. AD 2005-06-14 also provided an optional terminating action for the repetitive inspections. Since the FAA issued AD 2005-06-14, there has been a report of additional cracking on a MLG side stay on which the terminating action has been done. This AD continues to require the actions specified in AD 2005-06-14 and requires new repetitive inspections for cracking of the MLG side stay outer link and replacement if necessary as specified in a United Kingdom (U.K.) Civil Aviation Authority (CAA) (U.K. CAA) AD, which is incorporated by reference. This AD also prohibits the installation of affected parts under certain conditions. The FAA is issuing this AD to address the unsafe condition on these products. **DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of May 2, 2005 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)).

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
 Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC
 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2022-1574; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

• For U.K. CAA material incorporated by reference in this AD, contact Civil Aviation Authority, Aviation House, Beehive Ring Road, Crawley, West Sussex RH6

0YR, United Kingdom; telephone +44(0) 330 022 4401; email continued.airworthiness@caa.co.uk; website caa.co.uk.

- For BAE Systems (Operations) Limited service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; website baesystems.com/Businesses/RegionalAircraft/index.htm.
- For Messier-Dowty service information identified in this AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; telephone 703-450-8233; fax 703-404-1621; website techpubs.services/messier-dowty.com.
- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2022-1574.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3228; email todd.thompson@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2022-1574; Project Identifier MCAI-2022-01362-T" at the beginning of your comments. The most helpful comments reference a specific portion of the final

rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Todd Thompson, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3228; email todd.thompson@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA issued AD 2005-06-14, Amendment 39-14024 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)) (AD 2005-06-14), for certain British Aerospace Model BAe 146 and Model Avro 146-RJ series airplanes. AD 2005-

06-14 was prompted by an MCAI originated by the Civil Aviation Authority (CAA), which is the aviation authority for the United Kingdom (U.K.) (U.K. CAA). U.K. CAA issued U.K. CAA AD 004-05-2001 to correct an unsafe condition.

AD 2005-06-14 required repetitive inspections for cracking of the outer links on the MLG side stays, and corrective actions if necessary. AD 2005-06-14 provided an optional terminating action for the repetitive inspections. The FAA issued AD 2005-06-14 to prevent cracking of the outer links of the MLG side stays, which could result in failure of a side stay and consequent collapse of the landing gear.

Actions Since AD 2005-06-14 Was Issued

Since the FAA issued AD 2005-06-14, U.K. CAA superseded U.K. CAA AD 004-05-2001, dated May 1, 2001 (U.K. CAA AD 004-05-2001), and issued U.K. CAA AD G-2022-0018, dated October 18, 2022 (U.K. CAA AD G-2022-0018) (referred to after this as "the MCAI"), to correct an unsafe condition on all BAe 146-301, BAe 146, and AVRO 146-RJ airplanes. Model BAe 146-301 airplanes are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those airplanes in the applicability. The MCAI states that since U.K. CAA AD 004-05-2001 was issued, there has been a report of additional cracking on a MLG side stay on which the terminating action has been done.

The FAA is issuing this AD to address cracking on the shoulders of a MLG side stay outer link. The unsafe condition, if not addressed, could lead to failure of the side stay outer link and MLG collapse, which could result in a runway departure and could result in the engine or wing contacting the ground. The engine or wing contacting the ground could result in damage to the airplane, an increased risk of fire, the airplane flipping, and injury to occupants. You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2022-1574.

Related Service Information under 1 CFR Part 51

U.K. CAA AD G-2022-0018 specifies procedures for doing repetitive detailed inspections for cracking of the MLG side stay outer link and replacement if necessary.

The FAA reviewed BAE Systems (Operations) Limited Alert Service Bulletin ASB.32-A189, dated September 16, 2022. This service information identifies the affected parts as MLG side stay outer links having Safran Landing Systems part numbers 200884304, 200884305, 200884346, 200884347, 201105300, 201105301, 201105308, 201105309, 201299300, 201299301, 201299305, or 201299306, and describes procedures for doing, among other actions, repetitive detailed inspections for cracking of MLG side stay outer links and replacement if necessary.

The FAA also reviewed Messier-Dowty Service Bulletin 146-32-147, dated May 29, 2001, which identifies the affected MLG side stay outer links for AD 2005-06-14.

This AD also requires BAE Systems (Operations) Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001, which the Director of the Federal Register approved for incorporation by reference as of May 2, 2005 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)).

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information described above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Requirements of this AD

This AD continues to require the actions specified in AD 2005-06-14 and requires accomplishing the actions specified in U.K. CAA AD G-2022-0018 described previously, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under "Differences Between this AD and the MCAI." This AD also prohibits the installation of affected parts under certain conditions. Accomplishing the new inspections specified in U.K. CAA AD G-2022-0018 terminates the retained inspections required by AD 2005-06-14.

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. As a result, U.K. CAA AD G-2022-0018 is incorporated by reference in this AD. This AD requires compliance with U.K. CAA AD G-2022-0018 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD.

Differences Between this AD and the MCAI

The applicability of U.K. CAA AD G-2022-0018 includes all BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes and Model Avro 146-RJ-RJ70A, 146-RJ85A, and 146-RJ100A airplanes. However, the applicability of this AD is limited to BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes and Model Avro 146-RJ-RJ70A, 146-RJ85A, and 146-RJ100A airplanes with MLG side stay outer links having Safran Landing Systems part number 200884304, 200884305, 200884346, 200884347, 201105300, 201105301, 201105308, 201105309, 201299300, 201299301, 201299305, or 201299306, as specified in BAE Systems (Operations) Limited Alert Service Bulletin ASB.32-A189, dated

September 16, 2022, because the unsafe condition only applies to those MLG side stay outer links.

Interim Action

The FAA considers that this AD is an interim action. If final action is later identified, the FAA might consider further rulemaking then.

FAA's Justification and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for "good cause," finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because of possible MLG collapse, which could result in a runway departure, and could result in the engine or wing contacting the ground. The engine or wing contacting the ground could result in damage to the airplane, an increased risk of fire, the airplane flipping, and injury to occupants. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Regulatory Flexibility Act (RFA)

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 15 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2005-06-14	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$1,275
New actions	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$1,275

The FAA has received no definitive data on which to base the cost estimates for the on-condition actions specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:
- a. Removing Airworthiness Directive (AD) 2005-06-14, Amendment 39-14024 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)); and
 - b. Adding the following new AD:

2022-25-18 BAE Systems (Operations) Limited: Amendment 39-22274; Docket No. FAA-2022-1574; Project Identifier MCAI-2022-01362-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2005-06-14, Amendment 39-14024 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)) (AD 2005-06-14).

(c) Applicability

This AD applies to BAE Systems (Operations) Limited Model BAe 146-100A, -200A, and -300A airplanes and Model Avro 146-RJ-RJ70A, 146-RJ85A, and 146-RJ100A airplanes, certificated in any category, with main landing gear (MLG) side stay outer links having Safran Landing Systems part number 200884304, 200884305, 200884346, 200884347, 201105300, 201105301, 201105308, 201105309, 201299300, 201299301, 201299305, or 201299306.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Unsafe Condition

This AD was prompted by reports of cracking on the shoulders of a main landing gear (MLG) side stay outer link. The FAA is issuing this AD to address cracking of the MLG side stay outer link. The unsafe condition, if not addressed, could lead to failure of the side stay outer link and MLG collapse, which could result in a runway departure, and could result in the engine or wing contacting the ground. The engine or wing contacting the ground could result in damage to the airplane, an increased risk of fire, the airplane flipping, and injury to occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Inspections, with New Terminating Action

This paragraph restates the requirements of paragraph (f) of AD 2005-06-14, with new terminating action. For airplanes having any side stay identified in Messier-Dowty Service Bulletin 146-32-147, dated May 29, 2001: At the applicable time specified in paragraph (g)(1) or (2) of this AD, perform a detailed inspection for cracks of the outer links on the MLG side stays, in accordance with the Accomplishment Instructions of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001. Repair cracks before further flight in accordance with the Accomplishment Instructions of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001. Thereafter, repeat the inspection at intervals not to exceed 2,000 flight cycles, until the actions specified in paragraph (h) of this AD have been done or the initial inspection required by paragraph (i) of this AD has been done. Although BAE Systems (Operations) Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001, specifies to report certain information to the manufacturer, this AD does not require a report.

- (1) If the number of flight cycles accumulated on the side stay can be positively determined: Inspect before the accumulation of 2,000 total flight cycles on the side stay, or within 500 flight cycles after May 2, 2005 (the effective date of AD 2005-06-14), whichever occurs later.
- (2) If the number of flight cycles accumulated on the side stay cannot be positively determined: Inspect within 500 flight cycles after May 2, 2005 (the effective date of AD 2005-06-14).

(h) Retained Optional Terminating Action for Paragraph (g) of this AD, with No Changes

This paragraph restates the optional terminating action of paragraph (g) of AD 2005-06-14, with no changes. Relocation of each affected grease nipple to the upper surface of the outer link of the MLG side stays terminates the repetitive inspections

required by paragraph (g) of this AD, if the relocation action is done in accordance with paragraph 2.C. of the Accomplishment Instructions of BAE Systems (Operations)

Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001.

(i) New Requirements

Except as specified in paragraph (j) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, United Kingdom Civil Aviation Authority AD G-2022-0018, dated October 18, 2022 (U.K. CAA AD G-2022-0018).

(j) Exceptions to U.K. CAA AD G-2022-0018

- (1) Where U.K. CAA AD G-2022-0018 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The "Remarks" section of U.K. CAA AD G-2022-0018 does not apply to this AD.
- (3) Where paragraph (2) of U.K. CAA AD G-2022-0018 refers to "discrepancies (i.e. cracks or other adverse findings)," replace the text "discrepancies (i.e. cracks or other adverse findings)," with "any cracking."
- (4) Where U.K. CAA AD G-2022-0018 refers to ASB.32-A189, this AD requires using BAE Systems (Operations) Limited Alert Service Bulletin ASB.32-A189, dated September 16, 2022.

(k) No Reporting Requirement

Although BAE Systems (Operations) Limited Alert Service Bulletin ASB.32-A189, dated September 16, 2022, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(l) Additional AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (n) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or the United Kingdom Civil Aviation Authority (U.K. CAA); or BAE Systems (Operations) Limited's U.K. CAA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(m) Additional Information

For more information about this AD, contact Todd Thompson, Aerospace Engineer, Large Aircraft Section, FAA, International Validation Branch, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3228; email todd.thompson@faa.gov.

(n) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

- (3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
- (i) BAE Systems (Operations) Limited Alert Service Bulletin ASB.32-A189, dated September 16, 2022.
 - (ii) Messier-Dowty Service Bulletin 146-32-147, dated May 29, 2001.
- (iii) United Kingdom Civil Aviation Authority (U.K. CAA) AD G-2022-0018, dated October 18, 2022.
- (4) The following service information was approved for IBR on May 2, 2005 (70 FR 15574, March 28, 2005; corrected April 14, 2005 (70 FR 19681)).
- (i) BAE Systems (Operations) Limited Inspection Service Bulletin ISB.32-156, Revision 1, dated July 3, 2001.
 - (ii) [Reserved]
- (5) For BAE Systems (Operations) Limited service information identified in this AD, contact BAE Systems (Operations) Limited, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; website baesystems.com/Businesses/RegionalAircraft/index.htm.
- (6) For Messier-Dowty service information identified in this AD, contact Messier-Dowty: Messier Services Americas, Customer Support Center, 45360 Severn Way, Sterling, VA 20166-8910; telephone 703-450-8233; fax 703-404-1621; website techpubs.services/messier-dowty.com.
- (7) For U.K. CAA AD G-2022-0018, contact Civil Aviation Authority, Aviation House, Beehive Ring Road, Crawley, West Sussex RH6 0YR, United Kingdom; telephone +44(0) 330 022 4401; email continued.airworthiness@caa.co.uk; website caa.co.uk.

(8) You may view this material at the FAA, Airworthiness Products Section,

Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on

the availability of this material at the FAA, call 206-231-3195. This material may be

found in the AD docket at regulations.gov under Docket No. FAA-2022-1574.

(9) You may view this material that is incorporated by reference at the National

Archives and Records Administration (NARA). For information on the availability of this

material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-

register/cfr/ibr-locations.html.

Issued on December 1, 2022.

Christina Underwood, Acting Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

[FR Doc. 2022-27007 Filed: 12/8/2022 4:15 pm; Publication Date: 12/12/2022]